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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,551	11/06/2001	Xumu Zhang	823.0090USQ	1453

7590 01/27/2003

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EXAMINER

SOLOLA, TAOFIQ A

ART UNIT

PAPER NUMBER

1626

DATE MAILED: 01/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,551

Applicant(s)

ZHANG, XUMU

Examiner

Taofiq A. Solola

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-22 and 37-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 23-35 is/are rejected.
- 7) ☐ Claim(s) 36 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

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Claims 1-42 are pending in this application.

Claims 1-²²~~31~~, 37-42 are drawn to non-elected invention.

Restriction Requirement

The election of group III with traversal, in Paper No. 6, filed 11/19/02, is hereby acknowledged. The traversal is on the basis that ligands, catalyst employing the ligands and process thereof were issued in US 6,043,396, a copy of which, is provided by applicant. This is not persuasive because while the Office does not allow the Examiner to comment on the work of another Examiner, the Office is not in the business of perpetuating its error.

The restriction is still deemed proper and therefore made FINAL.

Claim Rejections - 35 USC § 112

Claims 23-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The substituents of formulae A to D in claim 1, are not defined in the claim. Therefore, claims 23-34 are indefinite.

The phraseology "derived from" on line 2, claims 34-35, renders the claims indefinite. As written, it appears applicant is claiming derivatives of the formulae L8 (A) and 24 f. If applicant does not intend to claim the derivatives, the phraseology must be deleted from the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 23-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Drent et al., EP 0 501 586 A2.

Drent et al., disclose a phosphorus bidentate ligand useful as a catalyst. See column 1, lines 11-19 and the attached abstract.

Claims 23-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Sturmer et al., US 6,043,396.

Sturmer et al., disclose a phosphorus bidentate ligand useful as a catalyst. See column 2, lines 51-55, the examples and claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 23-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner et al., Zeitschrift Fuer Naturforschung, B: Chemical. Sciences (1996), Vol. 51, No 8, pp. 1210-1212.

Applicant claims catalysts comprising compounds of formulae A- D wherein (from claim 1), R and R1 are each alkyl; R2 is alkyl substituted by diphenylphosphine. R1 is also $-(CH_2)_n-$, optionally substituted, and n is 1 or divalent aryl. See claim 31, for example.

Determination of the scope and content of the prior art (MPEP §2141.01)

Brunner et al., teach the process of making compound I, and its use as enantioselective catalyst.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the instant invention and that of Brunner et al., is that applicant is claiming alkyl at position R instead of H by Brunner et al.

Finding of prima facie obviousness---rational and motivation (MPEP §2142.2413)

However, H and alkyl are art recognized equivalents. *In re Lincoln*, 126 USPQ 477, 53 USPQ 40 (CCPA, 1942); *In re Druey*, 319 F.2d 237, 138 USPQ 39 (CCPA, 1963); *In re Lohr*, 317 F.2d 388, 137 USPQ 548 (CCPA, 1963); *In re Hoehsema*, 399 F.2d 269, 158 USPQ 598 (CCPA, 1968); *In re Wood*, 582 F.2d 638, 199 USPQ 137 (CCPA, 1978); *In re Hoke*, 560 F.2d 436, 195 USPQ 148 (CCPA, 1977); *Ex parte Fauque*, 121 USPQ 425 (POBA, 1954); *Ex parte Henkel*, 130 USPQ 474, (POBA, 1960).

Therefore, the instant invention is prima facie obvious from the teaching of Brunner et al. One of ordinary skill in the art would have known to change methyl with H at the time the invention was made. The motivation is to make compounds having structural similarity with the expectation that such compounds would have similar chemical and/or biological activities.

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Claims 23-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner et al., J. Organometallic Chem. (1991), Vol. 413, Nos 1-3, pp. 55-63.

Applicant claims catalysts comprising compounds of formulae A- D wherein (from claim 1), R and R1 are each alkyl; R2 is alkyl substituted by diphenylphosphine. R1 is also $-(CH_2)_n-$, optionally substituted, and n is 1.

Determination of the scope and content of the prior art (MPEP §2141.01)

Brunner et al., teach the process of making compounds 7-14 and their use as enantioselective catalysts.

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the instant invention and that of Brunner et al., is that applicant is claiming alkyl at position R instead of H by Brunner et al.

Finding of prima facie obviousness---rational and motivation (MPEP §2142.2413)

However, H and alkyl are art recognized equivalents. *In re Lincoln*, 126 USPQ 477, 53 USPQ 40 (CCPA, 1942); *In re Druey*, 319 F.2d 237, 138 USPQ 39 (CCPA, 1963); *In re Lohr*, 317 F.2d 388, 137 USPQ 548 (CCPA, 1963); *In re Hoehsema*, 399 F.2d 269, 158 USPQ 598 (CCPA, 1968); *In re Wood*, 582 F.2d 638, 199 USPQ 137 (CCPA, 1978); *In re Hoke*, 560 F.2d 436, 195 USPQ 148 (CCPA, 1977); *Ex parte Fauque*, 121 USPQ 425 (POBA, 1954); *Ex parte Henkel*, 130 USPQ 474, (POBA, 1960).

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Therefore, the instant invention is prima facie obvious from the teaching of Brunner et al. One of ordinary skill in the art would have known to change methyl with H at the time the invention was made. The motivation is to make compounds having structural similarity with the expectation that such compounds would have similar chemical and/or biological activities.

Objection

Claim 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Taofiq A. Solola whose telephone number is (703) 308-4690. The examiner is on flexible work schedule and is generally out of the office on Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph McKane, can be reached on (703) 308-4537. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.


TAOFIQ SOLOLA
PRIMARY EXAMINER
Group 1626

January 21, 2003